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TTTGCTGTGATGGCCAGAAAGAAAGGGAACAGGCTTGTGTG  
CTGTGGCCCGTCCCAGAGCACTGGAGTTCCAGGAATGGACC  
CTCCCTCAGCAGCCCACCGTAGCAGTGA CTCTCGGGACTACCC  
TCGGACATTCCACATGTGAGGCTCGACTCACCGCCTTCCTT  
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TATGCCCAGAGTATGTCAGCGCCTGGTGA CTCTCAGGGCTCCA  
ATCTGGTATCTTGGTTTGGTGCAGTCAGGGAGTGGTGCTCC  
GATATGATTGGGGTGTTTGGGGAAAGAATTCTTTTCTGCTG  
CTTCCCGGTGCTGGGTCTACCGTCATTACAT

**Fig. 1**

MDCYLLLLLLLLGLAGQGSADSHPEVLQAPVGSSIL  
VQCHYRLQDVRALKVWCQFLQEGCHPLVTSVDRRA  
PGNGRIFLTDLGGGLLQVEMVTLQEEDTGEYGCVVE  
GAAGPQTLHRVSLLVLPPVPGPREGEEAEDEKETR  
IGTGSLLEDPSLDPSASAGPHEFRRRENRCQKQCIP  
LIWGAVLLLALVVVAVVIFAVMARKKGNRLVVCGPS  
QSTGVPGMDPPSAHRSSDGLPSDIPHVRLDSPPS  
FDSIYTGSSLDPPSSEPPAPPSQPPLPPKVLMSKS  
VTYATVVFPGGDKGKIASCEPVQDPPNSQTPPSK

**Fig. 2**

ATGGGCCTCACCCTGCTCTTGCTGCTGCTCCTGGGACTAGA  
AGGTCAGGGCATAGTTGGCAGCCTCCCTGAGGTGCTGCAGG  
CACCCGTGGGAAGCTCCATTCTGGTGCAGTGCCACTACAGG  
CTCCAGGATGTCAAAGCTCAGAAGGTGTGGTGCCGGTTCTT  
GCCGGAGGGGTGCCAGCCCCTGGTGTCTCAGCTGTGGATC  
GCAGAGCTCCAGCGGGCAGGCGTACGTTTCTCACAGACCTG  
GGTGGGGGCCTGCTGCAGGTGGAAATGGTTACCCTGCAGGA  
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GGGGGCCCCAGATTTTGCACAGAGTCTCTCTGAACATACTG  
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GGCTGAGAACGCATTCTCAGACCCTGCAGGCAGTGCCAACC  
CTTTGGAACCCAGCCAGGATGAGAAGAGCATCCCCTTGATC  
TGGGGTGCTGTGCTCCTGGTAGGTCTGCTGGTGGCAGCGGT  
GGTGCTGTTTGCTGTGATGGCCAAGAGGAAACAAGGGAACA  
GGCTTGGTGTCTGTGGCCGATTCTGAGCAGCAGAGTTTCA  
GGCATGAATCCCTCCTCAGTGGTCCACCACGTGAGTGACTC  
TGGACCGGCTGCTGAATTGCCTTTGGATGTACCACACATTA  
GGCTTGACTCACCACCTTCATTTGACAATACCACCTACACC  
AGCCTACCTCTTGATTCCCCATCAGGAAAACCTTCACTCCC  
AGCTCCATCCTCATTGCCCCCTCTACCTCCTAAGGTCCTGG  
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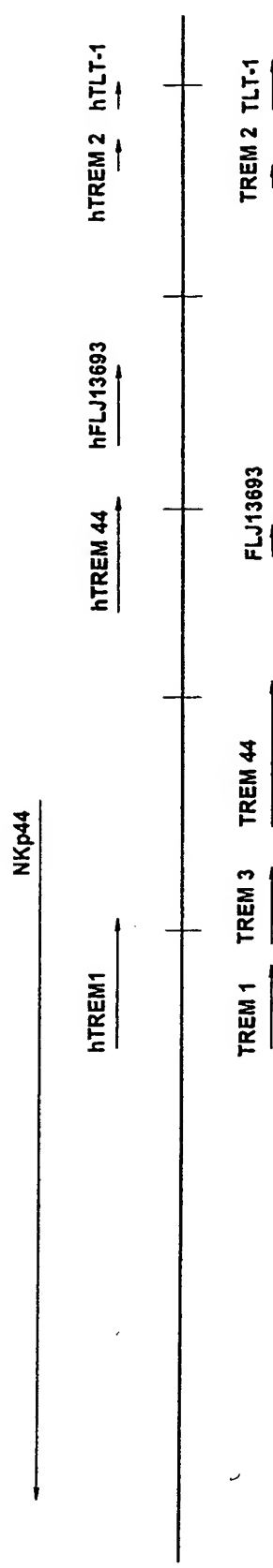
**Fig. 3**

MGLTLLLLLLLLGLEGQGI VGS LPEVLQAPVGSSILVQCHYR  
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GGLLQVEMVTLQEEDAGEY GCMVDGARGPQILHRVSLNIL  
PPEEEETHKIGSLAENAFSDPAGSANPLEPSQDEKSIPLI  
WGAVLLVGLLVAAVVLFAVMAKRKQGNRLGVCGRFLSSRVS  
GMNPSSVVHHVSDSGPAAELPLDVPHIRLDSPPSFDNTTYT  
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GGNKGGGTSCGPAQNPPNNQTPSS

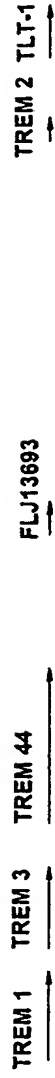
**Fig. 4**

# Genomic Organization of TREM Locus

Human Chromosome 6



Mouse Chromosome 17



TLT-1 Genomic structure

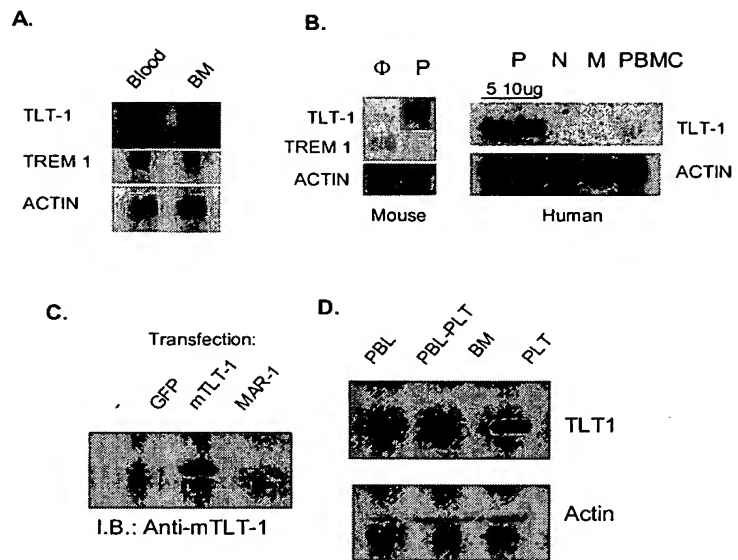
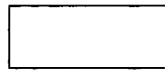


Figure 5

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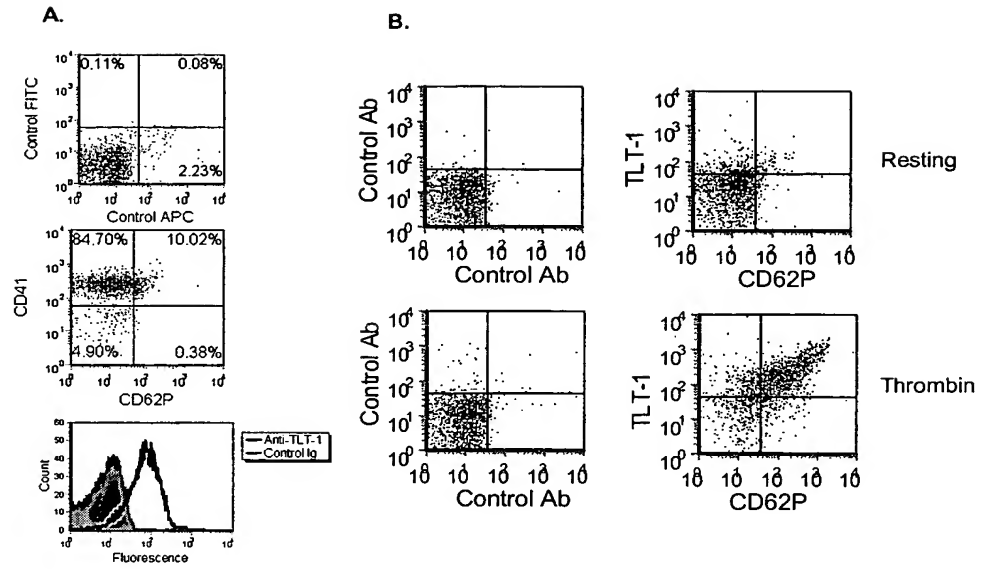
mTLT-1	MDCYLLLLLLLLGLAGQGSADSHPEVLQAPVGS <sup>Δ</sup> ILVQCHYRLQDVRALKVWCQFLQEGC	60
hTLT-1	.MGLT-----E---IVG-L-----K-Q-----R-P-----	59
mTLT-1	HPLV <sup>Y</sup> SAVDRRAPGNRIFLTDLGGLLQVEMVTLQEEDI <sup>Δ</sup> GEYGC <sup>Δ</sup> VEGAAGPQTLHRVS	120
hTLT-1	Q---S-----AGR-T-----A-----M-D---R---I-----	119
mTLT-1	LLVLPVPVGPGRDGEAEDEKETYRIGTGSLLDPSLDPSASAGPHEFRRENRCQKQICIP	180
hTLT-1	-NI-----E-E--HK-...-A-NAFS--AG--N-L-PSQD-.....KS--	163
mTLT-1	<u>LIWGAVLLLLALVVAVVIFAVMA.RKKGNRLVVCGPSQSTGVPGMDPPSAHRSSDGS...</u>	237
hTLT-1	<u>-----VG-L-A---L-----K-Q-----G-----RFL-SR-S--N-S-VV-HV-----PA</u>	223
mTLT-1	..LPSDIPHVRLDSPPSFD.SIYTGSSLDPPSSRP..PAPPSQPPLPPK <sup>Δ</sup> VLMSSKS <sup>Δ</sup>	292
hTLT-1	AE--L-V--I-----NTT--SLP--S--GK-SL-----S-L-----VC--P	283
mTLT-1	<sup>Δ</sup> FPGGDKGKIASCEPVQDPPNSQTTPPSK*	322
hTLT-1	-----N--GGT--G-A-N---N---S-*	311

Figure 6

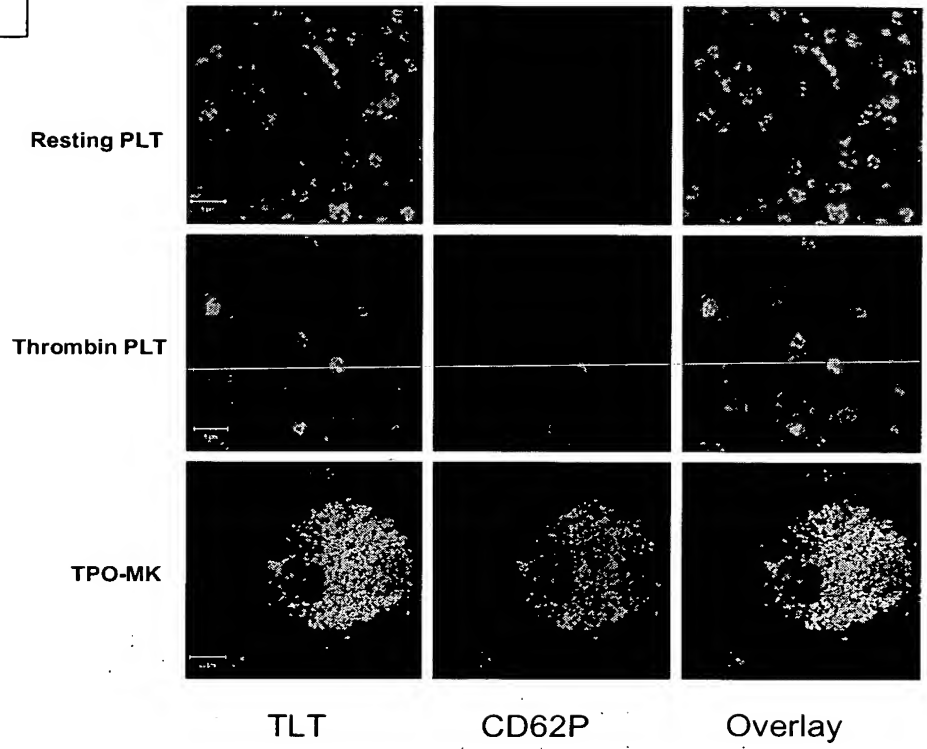
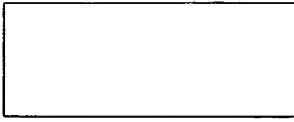


**Fig. 7**

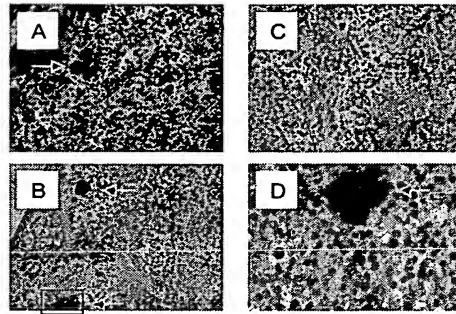




**Fig. 8**



**Fig. 9**



**Fig. 10**

GCCCTTAGAACCTACTACTGCCCAGCCATGGACTGCTACCT  
GCTGCTGCTGCTGCTGCTCCTGGGACTAGCAGGCCAAGGCT  
CAGCTGACAGTCATCCCGAGGTGCTACAGGCACCGGTGGGG  
TCATCCATTCTAGTGCAGTGCCACTACCGGCTCCAGGATGT  
GAGGGCTCTCAAGTCCCTGGCCCAAGAGATGGGGAGGAAGC  
AGAGGACGAGAAAGAAACCTATAGAATCGGAACTGGAAGTC  
TGCTCGAGGACCCCTCCTTGGACCCTTCCGCGAGTGCTGGT  
CCTCACGAGTTCAGACGTCTGTGAGAACAGTATCCCCCTGAT  
CTGGGGTGCTGTGCTCCTGTTGGCCCTGGTGGTGGTGGCTG  
TGGTGATATTTGCTGTGATGGCCAGAAAGAAAGGGAACAGG  
CTTGTTGTCTGT

**Fig. 11**

MDCYLLLLLLLLGLAGQGSADSHPEVLQAPVG  
SSILVQCHYRLQDVRALKSLAQEMGRKQRTK  
KPIESELEVCSRTPPWTLPRVLVLTSSDVVRT  
VSP

**Fig. 12**

AGAACCTACTACTGCCCAGCCATGGACTGCTACCTGCTGCT  
GCTGCTGCTGCTCCTGGGACTAGCAGGCCAAGGCTCAGCTG  
ACAGTCATCCCGAGGTGCTACAGGCACCGGTGGGGTCATCC  
ATTCTAGTGCAGTGCCACTACCGGCTCCAGGATGTGAGGGC  
TCTCAAGGTGTGGTGCCAGTTCTTGCAAGGAAGGCTGCCACC  
CACTAGTGACCTCAGCGGTGGACCGAAGAGCTCCGGGAAAC  
GGGCGCATATTCCTCACTGACCTGGGTGGGGGGCTCCTGCA  
GGTGAAATGGTGACCCTGCAGGAGGAGACACAGGGGAGT  
ATGGTTGTGTGGTGGAGGGAGCGGCAGGACCCCAGACCCTG  
CATAGGGTCTCCCTGTTGGTTCTTCCACCAGTCCCTGGCCC  
AAGAGAGGGGGAGGAAGCAGAGGACGAGAAAGAAACCTATA  
GAATCGGAACCGGAAGTCTGCTCGAGGACCCCTCCTTGGAC  
CCTTCCGCGAGTGCTGGTCCTCACGAGTTCAGACGGCGTGA  
GAACAGTATCCCCCTGATCTGGGGTGCTGTGCTCCTGTTGG  
CCCTGGTGGTGGTGGCTGTGGTGATATTTGCTGTGATGGCC  
AGAAAGAAAGGGAACAGGCTTGTTGTCTGTGGCCCGTCCCA  
GAGCACTGGAGTTCCAGGAATGGACCCTCCCTCAGCAGCCC  
ACCGTAGCAGTGACTCGGGACTACCCTCGGACATTCCACAT  
GTGAGGCTCGACTCACCGCCTTCCTTTGACTCTATCTACAC  
AGGCTCCTCTCTTGATCCACCATCAAGCGAACCCCCAGCTC  
CACCCCTCACAGCCCCCTCTGCCTCCTAAGGTCCTGATGTCC  
TCCAAGTCTGTGACATATGCCACAGTTGTCTTCCCAGGAGG  
GGACAAAGGTAAAATAGCCTCCTGTGAGCCAGTTCAGGACC  
CACCAAACAGTCAAACCTCCACCCAGTAAATAAGAGTACACT  
TTAATTTATTACTCTTGGGATCACCCCTGGGGAATTCTCTG  
CAGCCCGGCCAACTAGCTCTGCCTTTTATGCCCAGAGTATG  
TCAGCGCCTGGTGACTCAGGGCTCCAATCTGGTATCTTGGT  
TTGGTGCAGTCAGGGAGTGGTGCTCCGATATGATTGGGGTG  
TTTGGGGAAAGAATTCTTTTCTGCTGCTTCCCGGTGCTGGG  
TCTACCGTCATTACAT

**Fig. 13**

MDCYLLLLLLLLLGLAGQGSADSHPEVLQAPVG  
SSILVQCHYRLQDVRALKVWCQFLQEGCHPLV  
TSAVDRRAPGNGRIFLTDLGGGLLQVEMVTLO  
EEDTGEYGCVVEGAAGPQTLHRVSLLVLPPVP  
GPREGEEAEDEKETRYRIGTGSLLLEDPSLDPSA  
SAGPHEFRRENSEIPLIWGAVLLLALVVAVV  
IFAVMARKKGNRLVVCGPSQSTGVPGMDPPSA  
AHRSSDSGLPSDIPHVRLDSPPSFDSIYTGSS  
LDPPSSEPPAPPSQPPLPPKVLMSKSVTYAT  
VVFPGGDKGKIASCEPVQDPPNSQTPPSK

**Fig. 14**

CAGTGTGGTGGGAATTGCCCTTATGGGCCTCACCTGCTCTT  
GCTGCTGCTCCTGGGACTAGAAGGTCAGGGCATAGTTGGCA  
GCCTCCCTGAGGTGCTGCAGGCACCCGTGGGAAGCTCCATT  
CTGGTGCAGTGCCACTACAGGCTCCAGGATGTCAAAGCTCA  
GAAGGTGTGGTGCCGGTTCTTGCCGGAGGGGTGCCAGCCCC  
TGGTGTCTTCAGCTGTGGATCGCAGAGCTCCGGCGGGCAGG  
CGTACGTTTCTCACAGACCTGGGTGGGGGCCTGCTGCAGGT  
GGAAATGGTTACCCTGCAGGAAGAGGATGCTGGCGAGTATG  
GCTGCATGGTGGATGGGGCCAGGGGGCCCCAGATTTTGCAC  
AGAGTCTCTCTGAACATACTGCCCCCAGAGGAAGAAGAAGA  
GACCCATAAGATTGGCAGTCTGGCTGAGAACGCATTCTCAG  
ACCCTGCAGGCAGTGCCAACCCTTTGGAACCCAGCCAGGAT  
GAGAAGAGCATCCCCTTGATCTGGGGTGCTGTGCTCCTGGT  
AGGTCTGCTGGTGGCAGCGGTGGTGCTGTTTGCTGTGATGG  
CCAAGAGGAAACAAGAATCCCTCCTCAGTGGTCCACCACGT  
CAGTGACTCTGGACCGGCTGCTGAATTGCCTTTGGATGTAC  
CACACATTAGGCTTGACTCACCACTTCATTTGACAATACC  
ACCTACACCAGCCTACCTCTTGATTCCCCATCAGGAAAACC  
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**Fig. 15**

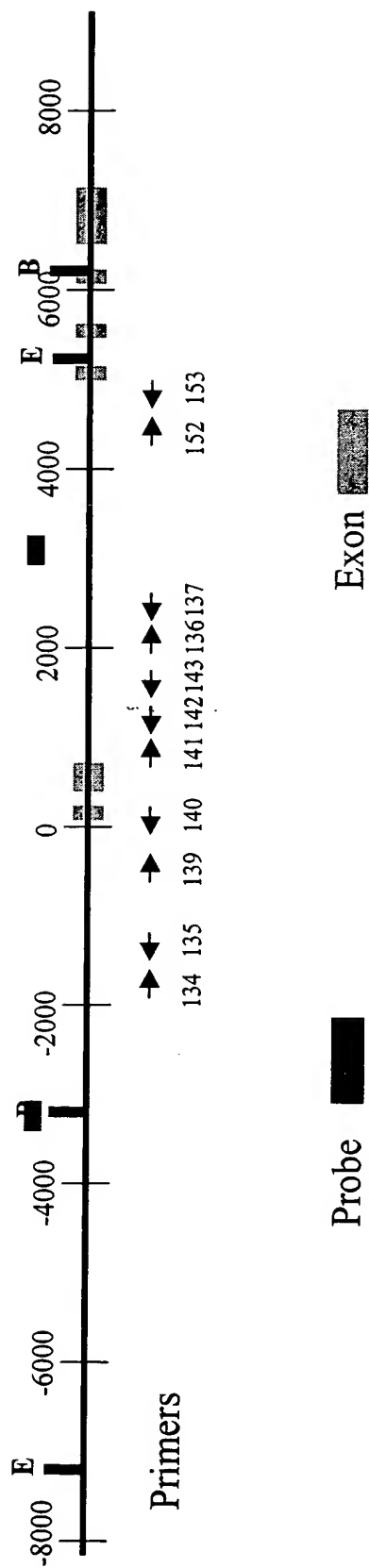


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EDAGEYGCMVDGARGPQILHRVSLNILPPEEE  
EETHKIGSLAENAFSDPAGSANPLEPSQDEKS  
IPLIWGAVLLVGLLVAAVVLFAVMAKRKQESL  
LSGPPRQ

**Fig. 16**

Fig. 17

# TLT-1 Genomic Region



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Fig. 18

## TLT-1 Knockout Construct

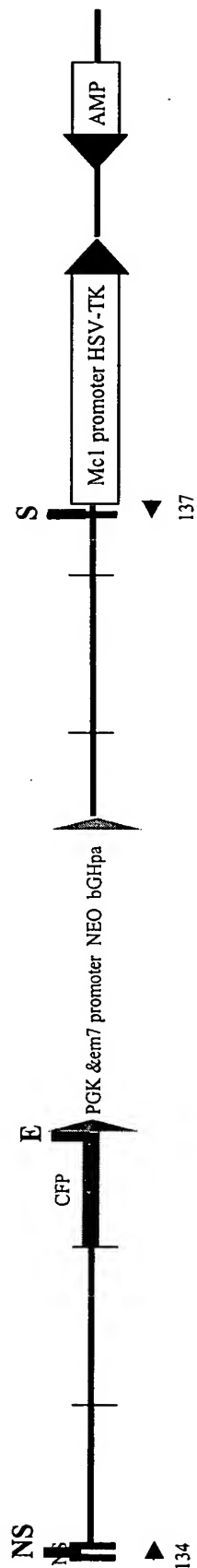
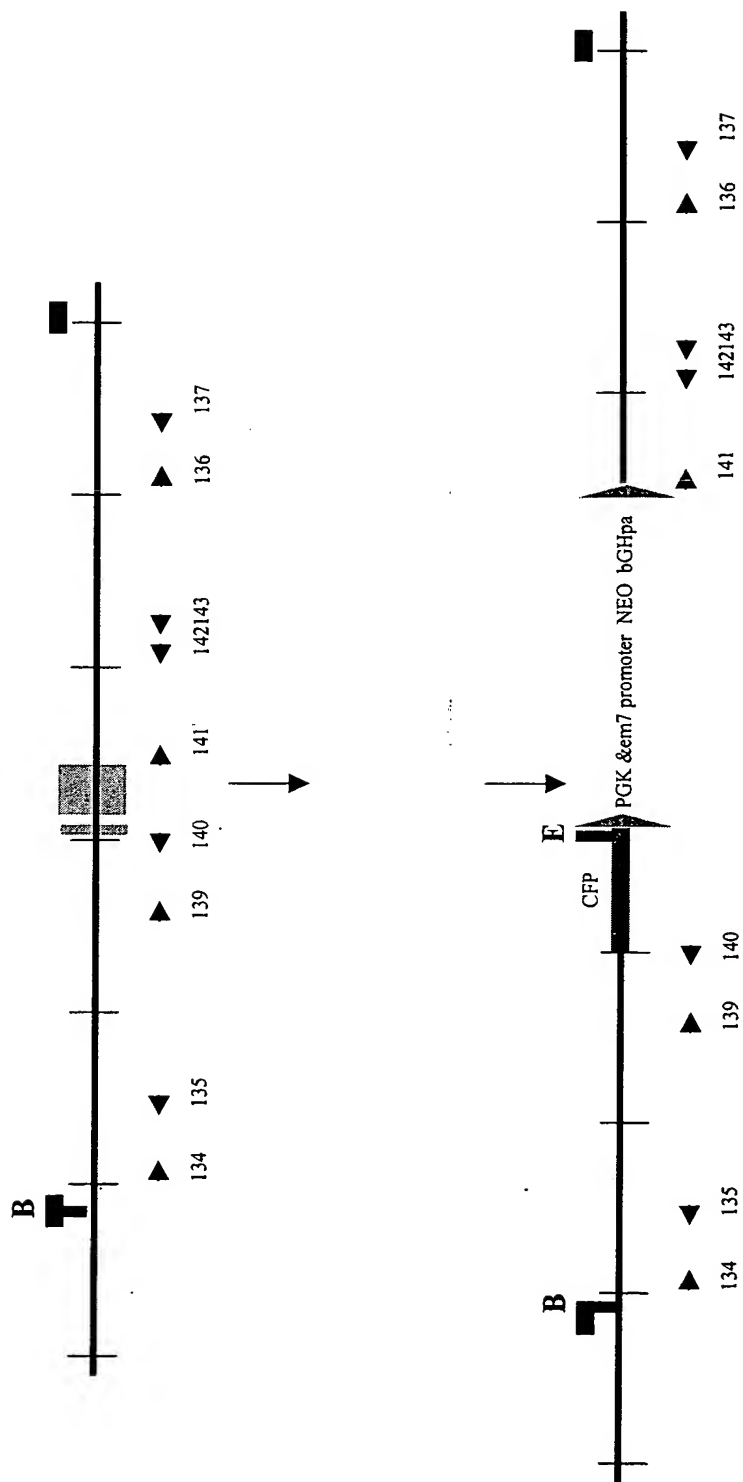


Fig. 19



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